



# COMMONWEALTH of VIRGINIA

## DEPARTMENT OF BEHAVIORAL HEALTH AND DEVELOPMENTAL SERVICES

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### Office of Integrated Health – Health Supports Network Health & Safety Alert/Information **Wheelchair Transitioning for Individuals with Intellectual and Developmental Disabilities**

#### Introduction

A safe transitioning process for transporting wheelchair users in an accessible vehicle involves a process that includes pre-loading (checking equipment and positioning the vehicle), loading (using lifts and ramps), securement (tie-downs and occupant seatbelts), and unloading. This Health & Safety Alert will focus primarily on the loading and unloading of dependent wheelchair users into accessible vehicles.

Ensuring the safety of wheelchair users and staff during the transitioning and transportation process requires a comprehensive approach focused on ongoing training, clear communication, and consistent equipment maintenance.

Staff should be thoroughly trained in the correct safety procedures involved in the transitioning process and be able to demonstrate them to their supervisor before acting independently. This includes understanding passenger assistance, and the correct use of vehicle lifts, ramps, and tie-downs. Staff should also be aware of the situations where injuries are more likely to occur.

Numerous studies have focused on the investigation of injuries to wheelchair-seated drivers and passengers through the years (5)(6)(7)(8)(15)(18)(19)(21)(31)(29)(28). The goal of the studies was focused on reducing risk, preventing fatalities, and improving outcomes for individuals, as well as support staff, who have also been injured during the transitioning process.

One of the most significant findings noted throughout the studies was a high percentage of wheelchair users who were improperly secured or were not secured at all. As a result, many of the individuals sustained



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serious-to-fatal injuries due to the non-use of securement equipment or the improper use of securement equipment.

The studies revealed some of the most common errors:

- Lap and shoulder belt failures
  - Lap belts were placed over the wheelchair armrests, which caused the belt webbing to be positioned high over the abdomen rather than on the pelvis.
  - Shoulder belts were loosely draped in front of a wheelchair user, but no lap belt was used.
  - Only lap belts were used without engaging the shoulder belt.
  - Lap and shoulder belts were hanging and unused on the vehicle sidewall.

Other transitioning injuries were due to:

- DME equipment failures
  - Wheelchair users rolled out of open vehicles and off wheelchair lifts when the wheelchair brakes failed.
- Vehicle lift failures
  - Wheelchair users were injured when the lift suddenly failed, and the lift and the individual plunged to the ground.
- Caregiver training/Education deficits
  - Wheelchair users rolled out of open vehicles and off wheelchair lifts when the wheelchair brakes were not locked or engaged properly.
  - Wheelchair users were seriously injured during the loading or unloading process when the caregiver did not fasten the vehicle doors properly. If the vehicle doors are not fastened properly, they can blow loose in the wind and strike the lift with such force it can knock both the wheelchair and user to the ground.
- Vehicle driver training/Education deficits
  - The accessible vehicle driver did not place the vehicle in the “park” gear properly.
  - The accessible vehicle driver did not engage the “emergency brake” properly.
  - The accessible vehicle driver attempted to load individuals while parked in a high-traffic area and was struck by another vehicle.

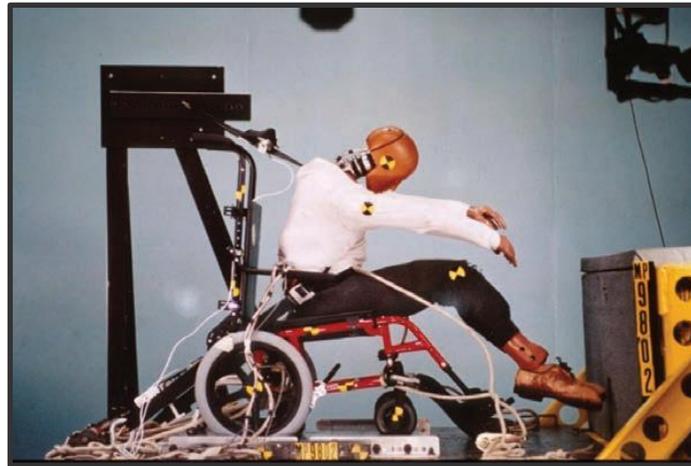
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- Wheelchair user errors/Misjudgment (15).
    - Wheelchair users failed to lock their own brakes.
    - Improper weight distribution caused by heavy backpacks or other equipment caused the wheelchair to tip.
    - Poor wheelchair user navigation skills.
    - Improper speed settings on power chairs.
    - Wheelchair users who neglected routine maintenance of the wheelchair, resulting in equipment failure.
  - Poor planning, Protocols/Policies of support persons, schools, etc.
    - Wheelchair loading and unloading in high traffic areas, which placed wheelchair users at increased risk of injury.
  - Errors or misjudgments by another vehicle driver
    - Wheelchair users were injured when the vehicle or the lift was struck by another vehicle while wheelchair users were on the lift.
  - Vehicle failures
    - If the vehicle's motor or electrical system fails or the vehicle slips out of gear (due to transmission failures) while the wheelchair user is suspended on the lift, the sudden jolt may cause the wheelchair user to topple off the lift.

## Best Practice Transitioning Recommendations

The following transitioning and transportation best practice recommendations are consistent with the guidelines and standards outlined by the Americans with Disabilities Act (ADA) (1990), the United States Department of Transportation (DOT) (2015), the Society of Automotive Engineers (SAE) (1999), the American National Standards Institute (ANSI) and the Rehabilitation Engineering and Assistive Technology Society of North America (RESNA) (2000).

In addition to the ANSI/RESNA WC19 standard (2000), which defines safety, design, and performance requirements for wheelchairs used as seats in motor vehicles. Many other studies support their conclusions and recommendations (5)(6)(7)(8)(15)(18)(19)(21)(31)(29)(28).

The ANSI/RESNA WC19 standard (2000) mandates frontal-impact testing, designated securement points, and accommodation for wheelchair-tiedown and occupant-restraint systems (WTORS) to ensure crashworthiness and promote the use of tested, compliant chairs over non-rated ones. Wheelchairs which are not WC19 approved should not be transported with the wheelchair user seated in them because they will not protect the wheelchair user in a vehicular crash (19).



A WC19 wheelchair frontal crash test (19)

### Key Components of the ANSI/RESNA WC19 (2000) Standard

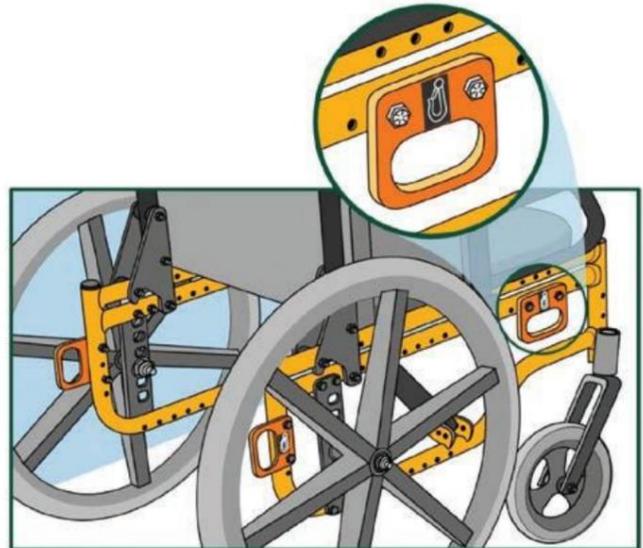
- Frontal Impact Protection - Wheelchairs must pass a 30-mph/20-g impact test while secured to a test platform.
- Securement Points - The standard requires specific, clearly marked anchor points (hooks) for a four-point strap-type tiedown system.
- Belt Compatibility: Designs must allow for proper positioning of vehicle-anchored, three-point lap and shoulder belt securement.
- Structural Integrity: Requirements address the ability of the wheelchair frame to withstand crash forces.
- Labeling and Information: Manufacturers must provide clear, user-friendly instructions on how to secure the wheelchair and the user properly, ensuring compliance with safety protocols.

By adhering to WC19, wheelchairs are designed to work in conjunction with vehicle safety systems, significantly increasing safety for users who remain in their chairs during transit (34). For a list of WC19-rated wheelchairs, click [here](#).

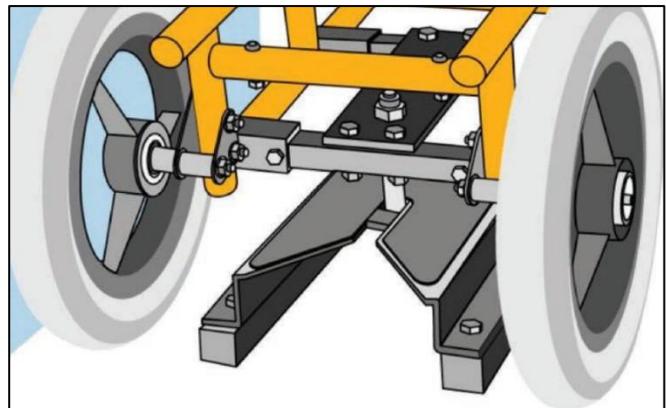
You can find the WC19 sticker on the frame of the wheelchair.



Securement points on a WC19 wheelchair (19).



WC19 wheelchairs can also be secured using a docking system (19).



## Wheelchair Loading Procedure with an Electric Lift

- For the safest experience, use two staff members so one is outside with the wheelchair user, and one is inside the vehicle whenever possible.
- Support staff should wheel dependent wheelchair users onto the lift.
- If the wheelchair has a tilt mechanism, make sure the tilt mechanism is not engaged (and the individual is upright), before starting the wheelchair securement process.
- Wheelchair users should be positioned on the lift, so they face away from the vehicle while on the wheelchair lift platform.
- Support staff should engage the wheelchair brakes on a manual wheelchair.
- Support staff should turn off the power for electric wheelchairs once the wheelchair is positioned on the wheelchair lift platform.
- Support staff should make sure the lift safety strap/belt is engaged. This is a critical safety component designed to hold a wheelchair securely in place on the platform, preventing it from rolling, tipping, or moving while the lift is in motion. The lift belt acts as a safety net for wheelchair users while on the lift (34).



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- Support staff should ensure the roll stops on the wheelchair lift platform are in the “up position”.
  - Support staff should then step off the lift onto the ground and make sure they are clear of the wheelchair lift before raising the lift platform.
  - Operate the lift slowly and smoothly.
  - When the lift stops at the securement level, the 2<sup>nd</sup> staff member should guide the individual’s wheelchair into position for securement (34).

### Accessible Lift Safety Tips

- Schedule regular maintenance checks of all lift mechanisms.
- If the lift has lurched or failed to work properly during the lift process (stopped and started), let your immediate supervisor know as soon as possible (follow your provider policies for proper notification). Do not use the lift until it is repaired.
- If you need resources for accessible vehicle repairs, lifts, ramps, etc., please email: [mreteam@dbhds.virginia.gov](mailto:mreteam@dbhds.virginia.gov) or [communitynursing@dbhds.virginia.gov](mailto:communitynursing@dbhds.virginia.gov)

### Wheelchair Loading Procedures Using a Ramp

- Stand behind the wheelchair user and walk or roll the wheelchair up the ramp slowly and carefully with the wheelchair user facing towards the vehicle.
- Make sure the ramp lies flat against the surface or ground.
- Ramp surfaces must be firm, stable, and slip-resistant under all conditions. This requirement helps to prevent accidents, especially in wet or icy conditions.
- Ensure the slope and rise of the ramp are not too steep for the wheelchair user to navigate safely (UMTRI, 2026). The vehicle accessibility standards are found in [49 CFR Part 38, Subpart B](#) and [Subpart G, Section 4.2.5 of FTA ADA Circular 4710.1](#). For those vehicles that are required to have accessible features, each feature must be fully operational when the vehicle is in use (22).

### The Vehicle Danger Zone

The "danger zone" for accessible vehicles (buses, vans, etc.) refers to the immediate area surrounding the vehicle. The danger zone is typically 12 feet from the vehicle in all directions but can extend up to 30 feet depending on the situation. Within the danger zone, in addition to the risk of being struck by the actual vehicle, there is also a risk of injury to passengers, staff, and bystanders who may be struck by lifts, ramps, or other

equipment while they are in motion. Staff who are not actively assisting an individual onto the bus should stay out of the danger zone. Specific danger zones for wheelchair-accessible vehicles (WAVs) and buses include the following:

- **Threshold Danger:** The area where the lift or ramp meets the vehicle is hazardous. An audible alarm and light should activate when or if someone steps on the threshold plate while the platform is 1 inch or more below the floor level of the accessible vehicle.
- **Rear-End Swing:** On larger vehicles, the rear end can swing out, bringing it closer to a person waiting nearby as it turns.
- **Ramp/Lift Clearance:** A 3-foot perpendicular distance from the bottom step/lift edge is often considered a danger zone during ramp or lift deployment (34).



## Wheelchair Securement Inside an Accessible Vehicle

- Guide the wheelchair into the securement area. This should be a clear, open space. The wheelchair must face forward, as side-facing or rear-facing positions are not recommended.
- Set/apply manual wheelchair brakes and turn the power to the “off” position for electric wheelchairs.
- To safely secure the wheelchair user, you will need a lap belt, a shoulder belt, or a combination belt.
- If the wheelchair has a tilt mechanism, make sure the tilt mechanism is not engaged (and the individual is upright) before starting the tie-down and securement process.

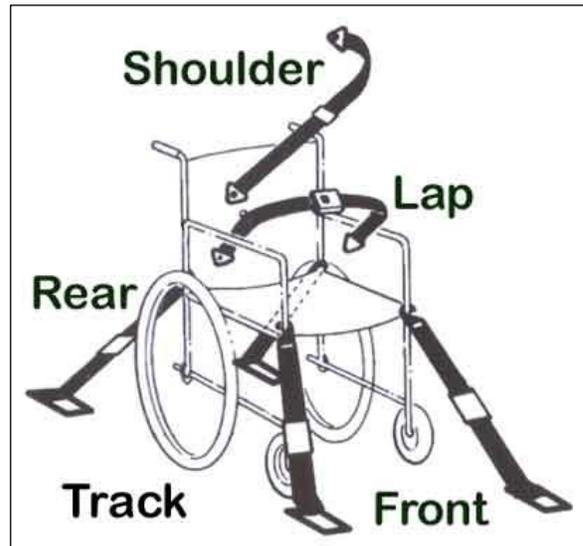
- Remove hard trays and secure them elsewhere in the vehicle to reduce the risk of injury to other occupants during a vehicular accident.
- If a tray must be used, use only foam trays during transit (35).



### **A 7-Point Securement System for Wheelchairs is Best Practice**

Combines a 4-point strap system to secure the mobility device to the vehicle floor and a 3-point lap/shoulder belt system to secure the occupant, which maximizes safety and reduces the risk of injury. This system prevents the wheelchair from tipping and ensures the user remains secure during sudden stops or collisions (36).

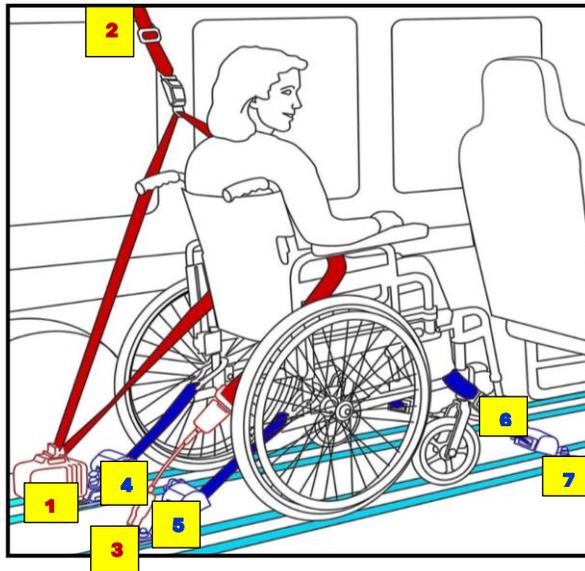
- Point #1-The shoulder belt is anchored to the vehicle at one end and the lap belt at the other.
- Point #2-The lap belt securely lies over the pelvis.
- Point #3-Can be attached in several ways:
  - To the school bus anchorage points.
  - To the wheelchair securement system.
  - To the wheelchair itself.
- Points #4, # 5, 6 and #7 secure the wheelchair to the vehicle.



- Do not attach straps to removable or weak parts of the wheelchair, such as wheels, armrests, or footrests.



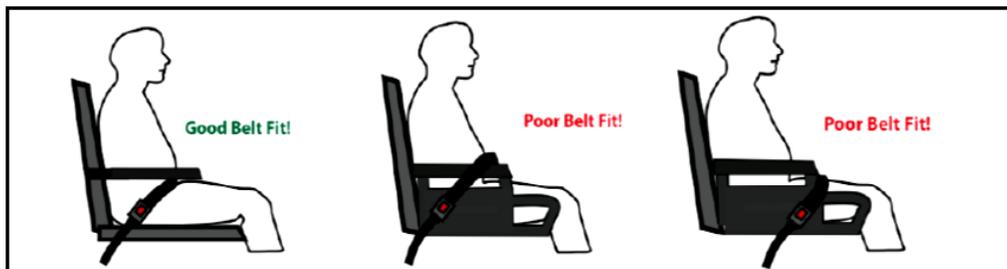
- The straps should not be twisted, kinked, crossed, or have knots in them.



**3 Point Seat Belt (red)**

**+ 4 Point Floor Securement (blue)**

**= 7 Point Securement System**



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- Tips for positioning the lap belt:
    - Place it over the pelvic bones, not on the abdomen.
    - Place it inside the armrests between the side panels and the cushion.
    - Adjust the lap belt so it is snug.
  - Tips for positioning the shoulder belt:
    - Position the shoulder belt so it does not cross the individual's face or neck.
    - Never position the shoulder belt under the individual's arms and cross over the rib cage.
    - Adjust the shoulder belt to achieve firm but comfortable tension.
    - The belts should never be twisted and should always lie flat against the body.

## **Safety Training for Individuals Who Use Wheelchairs**

Learning new skills can promote user confidence, mobility, and community engagement. Safety training should focus on teaching individuals wheelchair skills related to transfers, navigating obstacles, inclines, and daily tasks. Safety training for wheelchair users can also reduce the risk of wheelchair tip-overs and falls (26).

- A review of procedures and safety tips individuals should follow during the loading and unloading process.
- Techniques for safe transfers in/out of the chair, including locking brakes and ensuring stability.
- Safe navigation of doorways, sidewalks, slopes, turns, ramps, curbs, steep inclines, lifts, and uneven surfaces.
- Education on how to shift their weight while in their wheelchair to lower the risk of pressure injury.
- Utilizing 4-point tie-down systems and occupant restraints (lap/shoulder belts).
- How to engage the wheelchair brakes when the wheelchair is stationary.
- How to lower the risk of clothing or accessories from tangling in wheels.
- How to lower the risk of tipping by not hanging heavy backpacks or other items on the canes of the wheelchair.
- How to check anti-tippers to ensure they are in the correct position.

- How to make sure the wheelchair is forward-facing in a vehicle, with all removable parts secure.
- Be sure to document all training events with the individual, including the date, the time, and the name of the person who completed the training.

## Nighttime Visibility of Independent Wheelchair Users

Increasing nighttime visibility for independent wheelchair users is essential to reduce the high risk of accidents, as most vehicle-wheelchair collisions occur at night. Like cyclists, wheelchair users are difficult for drivers to spot in the dark. Nighttime presents a tenfold increase in danger when crossing streets. Poor visibility is the primary cause of accidents, making lights essential for preventing injuries from vehicles. Enhancing visibility increases safety, boosts the confidence of the wheelchair user, and promotes independence.

Research indicates that LED lighting, particularly 360-degree systems, offers the best visibility. Installing bright, adjustable, and durable LED lights on the wheelchair front, back, and wheels improves visibility in all directions. Wearing reflective vests and installing reflective strips, tape, or stickers on a wheelchair can also help to increase visibility. Proper illumination is a critical component of accessibility, directly enhancing the safety, independence, and confidence of wheelchair users (45). Please contact: [communitynursing@dbhds.virginia.gov](mailto:communitynursing@dbhds.virginia.gov) for a wheelchair lighting and reflective gear resource list.



## The Importance of Wheelchair Headrests

- Individuals should have a wheelchair headrest on their wheelchairs, even if the headrest is only used for vehicular transportation.
- The headrest should be positioned so that it extends higher than the individual's ears.
- The headrest should be less than 2 inches from the back of their head.
- A headrest will reduce the risk of serious head and neck injuries during crashes (18)(27).



## Person-Centered Support Needs to Consider

Support staff should consider the individual's chronic conditions, special equipment (e.g., medical, communication), and other factors that might be impacted during the transitioning and transportation process. All transitioning and transportation planning should be individualized and person-centered. Below are some factors to consider and discuss when developing the individual's Individual Support Plan relating to transportation.

Health-related risk factors to consider:

- Diabetes (food, or diabetes medications during transport, etc.).
- Hyper or hypothermia (consider placing a thermometer inside the vehicle).
- Sensory issues (noise, lights, etc.) (consider sunglasses, noise-blocking headphones, Bluetooth headbands with calming music, or window shades, etc).
- Medical fragility, seizures (do they need seizure meds during transport), etc.
- History of anaphylaxis (bees, etc.). (Should have a protocol for their epi-pen that includes transportation).
- Use of an oxygen tank, ventilator, etc.
- G-tubes, feeding pumps, heart monitors, colostomy bags, catheters, oxygen tubing, tanks, masks, etc.?
- Communication devices, iPads, sign language, etc., so the individual can relate their needs, pain, distress, etc.

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- Does the individual need someone to assist them when being transported?
    - An aide.
    - A nurse.

Behavioral risk factors to consider:

- Angry outbursts, aggressive behavior, etc.
- Squirming out of or undoing seatbelts, etc.
- PICA or eating another individual's food (or another accessible substance stored within the vehicle) during transitions.
- Elopement during transitions.
- History of previous injuries or incidents during transitions.
- History of previous injuries or incidents at any time while in a wheelchair (e.g., falls, turn-overs, or rolling away, etc.).

### **Best Practice Training for Staff Should Include**

- An "off-site" loading and unloading policy.
- An "on-site" loading and unloading policy, which should include the designation of a waiting area, a loading area, and an unloading thoroughfare or walkway for individuals.
- Instructions for staff on what "not to do" during the loading and unloading process.
- Instructions for staff on the order in which each passenger will be loaded and/or unloaded.
- Instructions for on-site staff on what they are to do when a vehicle is approaching the designated loading/unloading spot.
- Expected communication between staff members during the loading and unloading procedure.
- Assignments of staff. Who is responsible for what?
- Criteria for notifying a supervisor.
- A staff demonstration of transitioning and transportation procedures, techniques, and required safety measures using a check-off sheet so deficiencies or misunderstandings can be corrected before they cause an accident or injury.

- A written quiz for staff members so any misunderstandings or misinformation can be corrected.
- Remediation for any areas of learning that staff did not successfully demonstrate and/or do not fully understand.
- Instructions on how each staff member will be notified about the schedule and their role. (e.g., anticipated trips, how many staff are needed, etc.)
- An agency-wide policy for checking each wheelchair for any safety issues.
- Instructions on how to identify manufacturer-designated tie-down points.
- Instructions on how to check to see if the wheelchair is WC19 certified.
- How to confirm the power is turned off on electric wheelchairs before loading.
- An agency-wide policy for cleaning all wheelchairs on a routine basis.
- An agency-wide policy for staff to review an individual's ISP and any care or medical protocols before providing support.
- Caregivers and staff should stay on the ground and should never ride on the lift.
- Caregivers should never leave an individual unattended on a wheelchair lift.
- Caregivers should not avert their gaze from the individual on the wheelchair lift, and/or converse with other caregivers or individuals during the lift process, so they can help if something unexpected occurs.

## Best Practice when Dealing with Emergencies, Injuries, and Falls

The impact of a wheelchair in motion is potentially more severe than a typical fall. There is a high risk of significant head and spinal cord injury to the individual after a fall from a wheelchair to the ground, or from a wheelchair rolling out of an accessible vehicle or rolling off a lift.

- If a wheelchair user is involved in an accident, due to the following:
  - Falling out of the wheelchair onto the ground.
  - Tipping over sideways while in the wheelchair.
  - Tipping over backwards or forwards while in the wheelchair.
  - Falling off the lift while in the wheelchair.



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- Rolling out of the accessible vehicle while in the wheelchair.
  - Found on the ground (out of the wheelchair), and the staff member doesn't know what happened or how it happened.

Support staff should immediately call 9-1-1 if a person in a wheelchair is involved in any accidental fall or injury during the loading and unloading transitioning process, including those listed above. All falls from wheelchairs, lifts, or falls from any vehicle are serious events and require the caregiver to summon emergency services immediately.

- If an Accident Occurs, Support Persons Should:
  - Always stay with the injured person.
  - Refrain from moving the person unless the person is in an unsafe area (i.e., in the middle of traffic).
  - Never assume the person is okay just because there are no visible injuries; they could have internal injuries you cannot see.
  - Relay details of the accident, injury, or fall to EMT and/or hospital staff so they will know to check the individual for possible head, spinal cord, and other internal injuries.
- Tell the EMTs the individual needs to be checked for head, neck, and spinal cord injuries.

## Best Practice Driver Responsibilities

- A pre-loading checklist that includes a basic vehicle safety inspection.
  - Check the fuel.
  - Check mirrors.
  - Adjust your seat.
  - Make sure your cell phone is charged and placed somewhere securely in case of emergency, but not in your hands.
  - Check the heat and air conditioning and make sure they are working properly. *(Individuals who have profound neurological damage, those who are medically frail, and those with genetic syndromes often cannot regulate their body temperature.)*
  - Look around the vehicle.
  - Make sure the wheelchair lift and/or the wheelchair ramp are working properly.

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- Check the wheelchair securement system (tie-downs) and make sure everything is in good order.
  - How to document the safety check.
  - A driver post-trip checklist. (After everyone exits.)
    - Inspect all areas inside the vehicle to make sure everyone has exited, and no medical equipment or personal items (backpacks, etc.) have been left behind.
    - Inspect outside the vehicle to make sure nothing has been dropped.
    - Safely secure the vehicle.
  - How to position the vehicle for loading:
    - Park on level ground to ensure the lift or ramp is stable and operates correctly. For lift access, ensure enough clearance for the lift to fully extend without striking the curb.
    - Reinforce the importance of driver awareness when approaching the designated loading/unloading spot.
    - Where and how to park the vehicle when loading/unloading individuals.
  - How to account for everyone during the trip.
    - A driver safety procedure that accounts for each individual when loading, unloading, and parking for the night.
    - When everyone is seated/secured. Count the individuals. Write it down.
    - If you have multiple stops, after each person exits, make a note of it. (The driver should have a list of which individuals are riding on each leg of the trip.)
  - Destination instructions.
    - Instruct the driver on what they should do when they arrive at the destination.
    - Count the individuals. Write it down.
    - Make sure no one is missing.
  - Preparation of the vehicle when parking and locking it up for the night.
    - Placing the vehicle in “Park”.
    - Engaging the emergency brake.
    - Where to store the keys, etc.



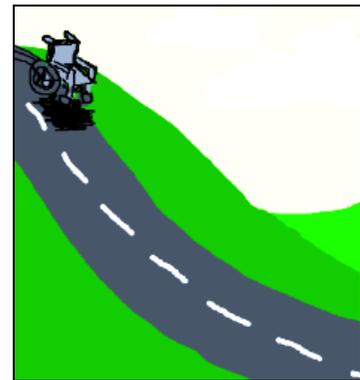
- Staff training should include the steps staff are to take after calling 911, which may include:
  - Notifying staff supervisors.
  - Notifying other staff at their agency.
  - Notifying parents or guardians to let them know the individual has been involved in an accident, etc.
  - Contacting other employees for back-up help.
  - Notifying the individual's PCP or other medical specialists to let them know the individual has been involved in an accident, etc.



Rear-View Mirror

## Wheelchair Transitioning Safety Tips

- Wheelchair users should never wait for accessible vehicle transport on an incline. (Even small inclines can be risky).
  - Wheelchair brakes can fail.
  - Individuals might unlock their own brakes.
  - Other individuals might unlock a dependent user's wheelchair brakes because they want to "help out".
  - Staff might forget to lock an individual's wheelchair brakes or may not properly engage them.



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- It is safer if individuals wait inside.
- Designate a “waiting area” on the inside of the building or home where individuals can congregate to wait for vehicle loading.
- Staff should be trained to load or unload only one individual at a time.
- Establish one designated pathway or “route” that caregivers will take from the home or building to load and unload wheelchair users.
- Check established thoroughfares daily for obstacles.
- Make sure hallway paths and sidewalks are dry and clear of rain, ice, and snow.
- Ensure walkways are well-lit and well-maintained.
- Signage minimizes confusion in busy areas, ensuring that loading zones are used for their intended purpose—short-term pick-ups and drop-offs—rather than long-term parking.
- Signage also helps to ensure that vehicles with ramps or lifts have the necessary space to operate and that designated areas remain available for those with disabilities.



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## Transitioning and Transportation of Students in Virginia

The Virginia Department of Education (VDOE) offers a comprehensive training program that incorporates best practice recommendations for all aspects of student transportation.

[2026 School Bus Driver Instructor Certification Training, Recertification Training and New Directors Training Schedule \(Word\)](#)

## Non-Emergency Medical Transportation (NEMT) in Virginia

NEMT is covered by Medicaid when you do not have another way to get to your doctor appointment or other Medicaid services. It is available for Medicaid members who are part of managed care health plans. There is also a fee-for-service program in Virginia. The phone numbers to call to arrange for transportation are on the member's ID card. Fee-for-Service (FFS) transportation assistance is managed and operated by ModivCare (formerly LogistiCare). Health plan and fee-for-service transportation telephone numbers for reservations and ride assistance can also be found at the following links (44):

- [Transportation Contacts for Reservations and Ride Assist/Customer Service \(ENGLISH\)](#)
- [Transportation Contacts for Reservations and Ride Assist/Customer Service \(SPANISH\)](#)

The Centers for Medicaid & Medicare Services (CMS) has published the guidelines and videos below to provide general information on emergency and non-emergency medical transportation, accepted types of transportation, types of transportation service delivery systems, and driver and vehicle acceptance criteria (14).

- [NEMT Fact Sheet for Beneficiaries \(PDF\)](#)
- [NEMT Booklet for Providers \(PDF\)](#)
- [NEMT Educational Video](#)
- [NEMT Educational Video Handout \(PDF\)](#)

## Caregiver Tips for Dealing with Transportation Companies

- Many individuals use transportation providers to ride to and from day programs and other activities.
- The transportation provider has the responsibility to make sure their drivers operate their equipment properly to ensure the safety of all individuals.

- Ask the transportation company if you can see their vehicle driver transition and transportation training program or policy. If they don't have one, share your transition and transportation training program, policies, and resources with them.
- Observe the vehicle driver and/or assistants and make sure they are using proper safety precautions when loading and unloading individuals.
- Notify the driver's supervisor or the agency/company if the driver is not using proper safety precautions when loading, transporting, and unloading individuals.
- When unloading and loading, caregivers and/or program staff should bring the person to and from the transportation provider's vehicle and should stay close by the individual, in case caregiver support is needed.
- Both vehicle drivers and caregivers should be focused on lowering the risk of injury to individuals and promoting safety.

## References

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*To the best of the OIHSN Nursing Team's knowledge the information contained within this alert is current and accurate. If the reader discovers any broken or inactive hyperlinks, typographical errors, or out-of-date content please send email to [communitynursing@dbhds.virginia.gov](mailto:communitynursing@dbhds.virginia.gov) to include the title of the Health & Safety alert with specifics details of concern.*

# Wheelchair Transitions and Transportation Quiz and Evaluation

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Email Address: \_\_\_\_\_

1. Ensuring the safety of wheelchair users and staff during the transitioning and transportation process requires a comprehensive approach focused on:
  - a. Ongoing training
  - b. Clear communication
  - c. Consistent equipment maintenance
  - d. All the above.
2. **WC-19** is a voluntary industry standard for:
  - a. A wheelchair that is safe to be used as a seat in a motor vehicle.
  - b. A wheelchair that is safe for morbidly obese individuals.
  - c. A light-weight foldable wheelchair.
  - d. A solar-powered motorized wheelchair.
3. The development of an “on-site” transitioning protocol should include:
  - a. Designation of a waiting area for loading and unloading individuals.
  - b. Staff training for all involved in the transitioning process.
  - c. Designation of a loading and unloading thoroughfare or walkway.
  - d. All the above.
4. After everyone exits the vehicle, it is **most important** for drivers to:
  - a. Inspect inside and outside of the vehicle for dropped items such as backpacks.
  - b. Make sure the vehicle is clean.
  - c. Inspect the inside of the vehicle to make sure everyone has exited and secure the vehicle.
  - d. Make sure you turn off the headlights.
5. Each year, many wheelchair users are seriously injured during the loading/unloading transition/transportation process because:
  - a. A lap and shoulder belt was left hanging on the vehicle sidewall.
  - b. Lap and shoulder belts were twisted, kinked or knotted.
  - c. Only lap belts were used without engaging the shoulder belt.
  - d. Lap belts were placed over the wheelchair armrests, which caused the belt webbing to be positioned high over the abdomen rather than on the pelvis.
  - e. All the above.
6. If not fastened properly, an accessible vehicle’s doors can blow loose and strike the wheelchair lift with such force that it can:
  - a. Make a dent on the side of the vehicle.
  - b. Scratch the paint off the side of the vehicle.
  - c. Knock the wheelchair and the user to the ground causing serious injury.
  - d. None of the above.
7. Wheelchair loading and unloading in high traffic areas:
  - a. Is not recommended.
  - b. Increases risk of injury.
  - c. Increases risk of the accessible vehicle being struck by another vehicle.
  - d. Increases risk of the wheelchair user experiencing a fall if the accessible vehicle is struck while the wheelchair and user are on the lift.
  - e. All the above.

# Wheelchair Transitions and Transportation Quiz and Evaluation

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Email Address: \_\_\_\_\_

8. If a vehicle lift has jerked or failed to work properly during the lift process you should:
  - a. Document the issue in your notes.
  - b. Buy some WD-40 and spray the lift mechanism.
  - c. Tell your supervisor and refrain from using the lift until it has been checked and/or repaired.
  - d. Pretend it never happened.
9. A fall from a wheelchair, a vehicle, a vehicle lift, or a patient lift:
  - a. Is always considered a serious injury, so you should immediately call 911.
  - b. Only occurs when it is raining.
  - c. Never happens.
  - d. None of the above.
10. What type of securement system is considered the safest method for securing a wheelchair user in an accessible vehicle:
  - a. A 4-point securement system.
  - b. A 2-point securement system.
  - c. A 5-point securement system.
  - d. A 7-point securement system.
11. Folding transport-type wheelchairs with a vinyl bottom and back:
  - a. Are not WC19 approved.
  - b. Greatly increases risk of injury to the wheelchair user during a vehicular crash.
  - c. Should not be used as a seat on an accessible vehicle.
  - d. Do not have WC19-approved securement brackets.
  - e. Are a significant liability for the wheelchair user and the licensed provider.
  - f. All the above.
12. The following are always ***bad ideas*** when developing a loading and unloading policy or plan:
  - a. Grouping individuals outside to wait for an accessible vehicle transport with no staff.
  - b. Designating an area on a steep hill as the agency's loading and unloading area.
  - c. Designating an area where there is heavy traffic as the agency's loading and unloading area.
  - d. Failing to use any signage designating loading and unloading areas.
  - e. All the above.
13. The following can increase risk of injury during the transitioning and transportation process:
  - a. Leaving a tilt-in-space wheelchair tilted when securing it.
  - b. An individual who tries to wiggle out of his/her wheelchair.
  - c. Leaving a hard tray in place on a wheelchair.
  - d. Failing to put the vehicle's emergency brake on.
  - e. Failing to lock wheelchair brakes.
  - f. All the above.
14. You should always call 911 if a wheelchair user is involved in which of the following accidents:
  - a. Falling out of the wheelchair onto the ground.
  - b. Tipping over sideways while in the wheelchair.
  - c. Tipping over backwards or forwards while in the wheelchair.
  - d. Falling off a vehicle lift while in the wheelchair.
  - e. Rolling out of the accessible vehicle while in the wheelchair.
  - f. Found on the ground (out of the wheelchair), and the staff member doesn't know what happened or how it happened.
  - g. All the above.

# Wheelchair Transitions and Transportation Quiz and Evaluation

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Email Address: \_\_\_\_\_

15. The shoulder strap should lie across the mid-point of the shoulder, and the lap belt portion should lie across the \_\_\_\_\_ during the occupant restraint process.
- a. Legs.
  - b. Abdomen.
  - c. Pelvis.
  - d. None of the above.
16. If a licensed provider supports a wheelchair user who only has a folding wheelchair that is not WC19 approved, they should:
- a. Pretend that the wheelchair is WC19 approved.
  - b. Make their own WC19 sticker and put it on the frame.
  - c. Do nothing and hope for the best.
  - d. Not allow the wheelchair user to go anywhere.
  - e. Contact an RNCC and let them know asap, because the MRE Team may have a donated WC19-approved wheelchair that can be used (with PT & PCP approval) until a WC19 wheelchair can be ordered.

## Evaluation:

- 1) Was the information presented in this Health & Safety Alert helpful?
  - a. Yes
  - b. No
- 2) Will you use this Health & Safety Alert information to train other staff?
  - a. Yes
  - b. No
- 3) Will you attend the Regional Nursing Meeting to obtain the Continuing Nursing Education (CNE) unit for this Health & Safety Alert?
  - a. Yes
  - b. Yes, but I would have attended the meeting regardless
  - c. No
  - d. No, I am not a nurse
- 4) What topic(s) would you like to have presented in a future Health & Safety Alert for CNEs?

5) Other Comments:

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